

Leading the Launch



IDAHO NATIONAL ENGINEERING AND ENVIRONMENTAL LABORATORY

*Delivering a payload of
responsive technologies*



Technology Deployment



HOME OF SCIENCE AND ENGINEERING SOLUTIONS



Vertical Profiling Time Domain Reflectometer

Problem

INEEL's Central Facilities Area (CFA) Remediation project needed to assess post-closure ground water infiltration at landfills II and III.

Baseline Technology

Intrusive excavation to install horizontal soil moisture sensors.

Innovative Technology

The Vertical Profiling Time Domain Reflectometer is a non-intrusive soil moisture sensor that is pushed through a disposal site's engineered cover.

Comparison

This sensor provides a continuous vertical soil moisture profile, while the baseline approach is limited to discrete horizontal placements.

Benefits

This sensor enables the project to obtain vertical soil moisture profiles used to validate the performance of engineered covers.